

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration and allowance in view of the foregoing amendments and following remarks. In the Office Action, mailed August 27, 2007, the Examiner rejected claims 1-20. By this response, claims 18 and 19 have been amended and claims 21-32 have been added, support for which can be at least found in paragraphs [0117] and [0118] and originally filed claims 1-13 of U.S. Patent Application Publication No. 20040085892. Following entry of this response, claims 1-32 will be pending in the application.

Claim Rejections – 35 USC § 102

In the Office Action, claims 1-8, 12, 13 and 15-20 are rejected under 35 USC § 102(b), as being allegedly anticipated by U.S. Patent No. 5,870,378 (hereinafter “Huang”). Applicants respectfully traverse this rejection.

Claim 1 recites a method for recovering data transmitted over a wireless communication channel in a multiple-access OFDM-CDMA system. The method comprises in part: “despreading the transformed samples with one or more sets of despreading coefficients to provide despread samples, wherein each set of despreading coefficients is associated with a respective despreading code that corresponds to a spreading code used to spread data prior to transmission and selected from a set of available spreading codes.”

According to MPEP §2131, “to anticipate a claim, the reference must teach every element of the claim.” Applicants respectfully submit that Huang fails to teach or suggest this limitation.

Referring to page 2 of the Office Action, contrary to the Examiner’s assertion, Huang does not teach transforming data samples and then despreading the *transformed* samples. The Examiner’s assertion that Huang teaches a “Pilot despreader 1201 and Walsh despreader 1202 [that] work in conjunction to despread the *transformed* data signals” (emphasis added) is incorrect.

Referring initially to col. 10, lines 42-46 and Figure 12, Huang discloses that the Pilot despreader multiplies the PN sequences by the input data (I/Q). The input data (I/Q) is not

transformed data, but is merely the down converted and filtered radio signal. See col. 4, lines 45-54 and Figure 4. Consequently, the despreaders taught by Huang do not despread transformed data, as recited by claim 1.

Referring to Figure 12, Huang discloses a shared accumulator circuit. Referring also to Figure 14, Huang discloses a block diagram teaching how to “combine the shared accumulator enhancement [of Figure 12] to the FWHT enhanced MC-CDMA receiver of FIG. 8.” See col. 10, lines 65-67. From these figures, it is clear that Pilot and Walsh despreaders despread the data signal. The despread signal is sent to the DSP bus. The DSP bus is connected to the DSP (not shown), where the Fast Walsh-Hadamard Transformations (FWHT) occur. See col. 11, lines 1-4. Thus, the FWHT transformation disclosed by Huang occurs *after* despreading the signal, and therefore does not teach or suggest despreading a *transformed* data signal, as required by claim 1.

For at least these reasons, Applicants submit that Huang fails to teach or suggest the limitations required by claim 1. Further, Applicants assert that no art of record, alone or in combination, teaches or suggests the limitations required by claim 1. Independent claims 12, 13, 18-21 and 27 recite features similar to independent claim 1, described above. Further, at least based on the allowability of the independent claims, dependent claims 2-8 and 15-17 are also patentably distinct over Huang and the art of record. Therefore, Applicants request that this rejection be withdrawn and these claims be allowed.

Claim Rejections – 35 USC § 103

In the Office Action, claims 3, 4, and 14 are rejected under 35 USC § 103(a), as being allegedly unpatentable over Huang in view of U.S. Publication No. 20040095907 (hereinafter “Agee”). Further, claims 9-11 are rejected under 35 USC § 103(a), as being allegedly unpatentable over Huang in view of U.S. Patent No. 6,038,450 (hereinafter “Brink”). Applicants respectfully traverse these rejections.

As presented above, Huang fails to teach Applicants’ claimed invention. The addition of Agee and/or Brink does not overcome the deficiencies noted with respect to Huang. Therefore,

the combination of Huang with Agee and/or Brink does not make obvious the combination recited in dependent claims 3, 4, 9-11 and 14.

Furthermore, it is respectfully asserted there is no reason to combine the teachings of Brink and/or Agee with Huang because such combination frustrates the improvements taught in Huang. Referring to col. 6, lines 36-43, Huang teaches the combination of a single complex correlator with a *postprocessing* FWHT unit to achieve a simplified circuit design. Meanwhile, Agee and Brink only teach Fourier Transforms for *preprocessing* signals in a receiver.

With respect to claim 4, the Examiner cites Agee for the proposition that Fourier Transforms offer several advantages over FWHT. However, Huang is clear that use of the postprocessing FWHT is necessary as it is part of the “significant improvement” taught by Huang. See col. 6, lines 36-43. Consequently, because Agee and Brink only teach methods requiring upfront Fourier Transforms, their teachings are incompatible with the simplified design in Huang. There is no sustainable reason for combining these references.

Therefore, for at least these reasons, the rejection of claims 3, 4, 9-11 and 14 should be reconsidered and withdrawn, and such action is respectfully requested.

CONCLUSION

Therefore, for at least the reasons presented above with respect to all of the pending claims subsequent to entry of this response, Applicants assert that all claims are patentably distinct from all of the art of record. All objections and rejections having been addressed, it is respectfully submitted that this application is in condition for allowance and a Notice to that effect is earnestly solicited. If any points remain in issue that the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Charge Statement: For this application, the Commissioner is hereby authorized to charge any required fees or credit any overpayment to Deposit Account 17-0026.

Respectfully submitted,
QUALCOMM Incorporated
Customer Number: **23696**

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By: /Ross L. Franks/
Ross L. Franks, Reg. No. 47,233
Tel. No.: (858) 845-1946

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, CA 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502